Editorial

A way forward, yes; a *Blueprint for a living continent*, no: a critical look at the Wentworth group's report of November 2002

Blueprint for a living continent. A way forward from the Wentworth group of concerned scientists (www.wwf.org.au/download/blueprint-for-a-living-continent.pdf) is a major document in Australian conservation biology. The list of 11 authors features names that are household words. Each author has made a mark in their own area of expertise and a coalition of their skills has produced a landmark document. The authors are Prof. Peter Cullen (freshwater ecologist, Australian Environmentalist of the Year 2001), Prof. Tim Flannery (palaeontologist, author, Director of the South Australian Museum), Assoc. Prof. Ronnie Harding (zoologist, Chair of the WWF Australia Scientific Advisory Committee), Dr Steve Morton (ecologist, Chief of Sustainable Ecosystems, CSIRO), Prof. Hugh Possingham (mathematical ecologist, Chair of the Commonwealth Biological Diversity Advisory Committee), Dr Denis Saunders (ecologist, former Chief Research Scientist with the CSIRO), Prof. Bruce Thom (geomorphologist, Chair of the 2001 Australian State of the Environment Committee), Dr John Williams (agricultural scientist, Chief of Land and Water, CSIRO), Prof. Mike Young (resource economist, Director of the Policy and Economic Research Unit, CSIRO), Mr Peter Cosier (environmental policy specialist with WWF Australia), and Ms Leith Boully (farmer, Chair of the Murray Darling Basin Community Advisory Committee).

The *Blueprint* is compulsory reading for all those who share the struggle to conserve Australia's biota and its life support systems, the soil, air and water. Convened by WWF Australia, the Wentworth Group deserves serious consideration when it is backed by a major NGO and governments start quoting it. Given its importance, and the likelihood that governments and conservation groups will use it as a platform for change, the document deserves a serious critique.

Let me state at the outset that the document is not what it purports to be. It is not a blueprint for survival (it is too narrow for that), but it does offer a way forward. Readers ought not to labour under the illusion that this blueprint will fulfil the aspiration of the WWF — "Saving life on earth".

One way to advance the cause of science is to publish a book and, in such a case, the writer faces criticism (from reviewers and the public) only after the book has been released. The *Australian Zoologist* publishes many book reviews as part of this critical process. One could also produce a document, such as a report, that is read critically by a select few (usually the people paying for the report), and here the process of critical review is less open to public scrutiny. These reports are often described as "grey literature". They do not have an ISBN (International Standard Book Number), which is the identifying code for a book. Some editors agonise over whether to accept references to such grey literature in their publications. Some reject them as references, but the *Australian Zoologist* recognises their importance in the conservation debate.

Blueprint for a living continent is a report in the ranks of grey literature (although the two subsequent Wentworth Group reports – *A new model for landscape conservation in New South Wales* and *Blueprint for a National Water Plan* – do have ISBNs), yet the original *Blueprint* has become so influential that every conservation biologist needs to look at it critically. Do you, as a working zoologist, think that the animals and the habitats you are working on will be saved by the Wentworth Group's formula? A straw poll of colleagues found that most had glanced at the report, some had skimmed it, but none had studied it. Consequently, no-one had assessed its worth as a scientific document or, rather, as a document produced by a group of scientists. If the *Blueprint for a living continent* is a key national strategy document in biodiversity conservation, as I believe it is, then surely it is worth studying when the NSW government has adopted it, and other governments are following its lead.

The scientists forming the "Wentworth Group" are, in their own words, "advocating radical and fundamental reform to halt further degradation of Australia's landscapes". Those not used to the cut and thrust of scientific criticism may regard any challenge to the *Blueprint* as impertinence or petty fault-finding, aimed at undermining the intent of the document. In my experience as an editor, most critical comments are aimed at improving the quality of a fellow scientist's work, and it was in this spirit that I wrote this editorial.

The strengths of the *Blueprint* are that it is brief, well-written and positive. It achieves what the *Future Dilemmas* report did not: it has become a guide to government action. The difference lies partly in the clarity of the writing, which was an impediment in the *Future Dilemmas* report (Lunney 2002, 2003). By contrast, the *Blueprint* is a document that advocates particular changes aimed at addressing specific problems. Further, it is inclusive of a wide community of interests from farmers to scientists, and thus has immediate appeal to those seeking solutions to the thorniest of biodiversity conservation issues. It attacks old bugbears, such as bureaucratic red tape, plumps for a new model of decision-making, namely regional committees, and produces the first major breakthrough in welding ecological economics to the urgent conservation issues of land clearing and water reform which came to a head in the intense drought of 2002. It is the economic agenda that is the great strength of the *Blueprint*.

The *Blueprint* presents an economic model couched in words of great clarity, but the subtext is numerical and this allows one to convert words to numbers, numbers to dollars, and dollars to policy, such as in relation to property rights (both water and land), compensation, improving market signals, tax systems support, eliminating hidden subsidies and improved regulation, that controls the flow of dollars and has the potential to produce a better agricultural system for Australia. As a triumph of this new ecological economic style, the *Blueprint* is set to dominate the conservation agenda for decades. One of the ensuing struggles will be to reconcile such currently accepted conservation paradigms as national parks and threatened species with the new approach. Failure to do so will be a setback for nature conservation across Australia. The *Blueprint* is more than just an influential report; it is a model for change. Forget the detail for the moment, and look at the scope of what the Wentworth Group identified as its collective aims. The Group itself had been galvanised after its members decided in October 2002 to produce a report which would debunk the notion of "droughtproofing" Australia and present some realistic alternatives. The Group's views are summarised on pages 3 and 4 of the report, as follows:

> "SUMMARY. BLUEPRINT FOR A LIVING CONTINENT. *A way forward from the Wentworth Group of concerned scientists.* The drought gripping much of Australia may bring long-lasting damage to the Darling and Murray Rivers and their communities later this year. In other parts of the nation, drought will cause serious damage to long-term productivity. As has always been the case, this drought will also place considerable hardship on some rural communities. We sympathise deeply with the plight of farmers and rural communities under these conditions. In the face of such a terrible drought we have heard calls for drought-proofing Australia and turning our coastal rivers inland. Australia cannot be drought-proofed. What we need to do is to start living sustainably in Australia. We need to learn to live in harmony with the landscape, not fight against it. As a nation we have grown wealthy on the food and fibre produced by extraordinarily hard working and innovative farmers. We have all shared in that wealth and we expect to continue to benefit from it. Yet it is time to give something back to the landscape and to the people who manage it. Our land management practices over the past 200 years have left a landscape in which freshwater rivers are choking with sand, where topsoil is being blown into the Tasman Sea, where salt is destroying rivers and land like a cancer, and where many of our native plants and animals are heading for extinction. On the 23rd October 2002 one dust-storm crossed the Australian continent and blew away an estimated 7 million tonnes of irreplaceable topsoil. We are taking more resources from our continent than its natural systems can replenish. That, by any definition, is unsustainable. The current crisis is an opportunity to design a new way of doing business to build resilience into rural and regional communities, enabling them to cope with the variability of our climate. This paper is about providing a new direction. We have sufficient knowledge now to set a new direction that will involve a change in land use towards practices that are in harmony with the highly variable climate that is intrinsic to Australia. Such a direction could see the farming community walking in partnership with science. If we get it right, Australia will continue to produce food and fibre for us and for the rest of the world. If we fail to act, history will judge us harshly. Considerable change is needed - and Australian farmers have demonstrated an extraordinary capacity to change. Further, our governments have, in recent years, supported three important foundations for this change: Landcare was established in 1990 by Prime Minister Hawke, and has captivated rural and urban Australians alike; the $2.5 billion Natural Heritage Trust was established in 1997 by Prime Minister Howard, which provided a huge financial boost to community groups; and in 2000, the Prime Minister, Premiers and Chief Ministers signed the National Action Plan for Salinity and Water Quality, aimed at reforming the institutional arrangements for managing the Australian landscape. A fourth foundation is needed that protects and rebuilds our landscapes. We need a delivery mechanism that will transform Australia's landscapes, rivers and the communities that depend on them. There are real opportunities for corporate Australia to invest in this process and to contribute to landscape scale transformation.
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> "*Blueprint for a Living Continent* sets out what we believe are the key changes that need to be made now, to deliver a sustainable future for our continent and its people. To live in harmony with the environment there is a need to: 1. Clarify water property rights and the obligations associated with those rights to give farmers some certainty and to enable water to be recovered for the environment. 2. Restore environmental flows to stressed rivers, such as the River Murray and its tributaries. 3. Immediately end broadscale landclearing of remnant native vegetation and assist rural communities with adjustment. This provides fundamental benefits to water quality, prevention of salinity, prevention of soil loss and conservation of biodiversity. 4. Pay farmers for environmental services (clean water, fresh air, healthy soils). Where we expect farmers to maintain land in a certain way that is above their duty of care, we should pay them to provide those services on behalf of the rest of Australia. 5. Incorporate into the cost of food, fibre and water the hidden subsidies currently borne by the environment, to assist farmers to farm sustainably and profitably in this country.
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> "The Council of Australian Governments (CoAG) has the opportunity to make three significant changes immediately, by ending broadscale clearing of remnant vegetation, by requiring the clarification of water property rights, and by agreeing to purchase urgently needed environmental flows for the Murray River and its tributaries. Achieving reform also requires fundamental changes in our approach to engaging with farmers and rural communities: 1. It is vital that we cut the bureaucratic red tape that is strangling on-ground action in Australia by creating accountable institutions that are owned by rural communities most affected by

> the problem; providing funding directly to farmers and regional communities to help them implement nationally accredited priorities, supported by world class scientific advice; and establishing a business-like national Natural Resource Management Commission (the environmental equivalent of the Productivity Commission) to oversee this process. 2. There is also an urgent need for a National Water Plan focusing on improving the health of our damaged rivers, protecting our remaining healthy rivers and improving water use efficiency across Australia. Despite water being our most scarce natural resource, we treat rivers as drains. If we keep doing this, neither our rivers nor the rural communities who depend on them have viable futures. Everything we do in the landscape impacts in some way on water quality - even in the driest parts of the continent. 3. To implement these steps it is vital that Commonwealth and State governments signal an in-principle, long-term commitment to an investment strategy to help the restoration work over the next 10 to 20 years, so that regional communities can face the challenge with confidence that the nation is behind them. Recent studies commissioned for the Business Leaders Roundtable and others suggest that a public investment of $20 billion is required over that time frame.
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> "As Dorothea McKellar put so simply and eloquently, Australia is a land of drought and flooding rains. We must learn to live with this legacy. By giving power back to our communities, valuing the ecosystem services provided by native vegetation, recognising the importance of environmental flows in our rivers, and rewarding people for environmental stewardship, our generation can leave a legacy of living rivers and healthy landscapes, not drains and dustbowls. Our continent is falling apart and it is not caused by drought - it is caused by poor policies and poor management. We don't have all the answers - nobody does - but before we start laying bricks and mortar, we have got to get the foundations right, otherwise the cathedral will tumble with the smallest of tremors. This blueprint is about another important step towards getting the foundations right."

Some ideas leap from this overview. The most striking among them is the language of business, with such key words in that lexicon as "property rights", "pay", "cost", "purchase", "hidden subsidies", "funding", "efficiency", "business leaders", " public investment", "sustainably and profitably" and "rewarding people". Of the five key changes, two environmental issues emerge: restoring environmental flows to stressed rivers; and ending broadscale landclearing. The other three are delivery mechanisms: clarifying water property rights; paying farmers for environmental services; and incorporating the hidden subsidy borne by the environment, such as the loss of 7 million tonnes of soil that blew away on 23 October 2002, into the cost of food, fibre and water. So, two urgent problems and three tangible solutions have been identified in 149 words. Brilliant. By September 2003 both the NSW government and the Commonwealth and other state governments had taken action on both native vegetation clearing and a national water plan. This is an extraordinary success story. In generating the idea and selecting and convening the Wentworth Group, the WWF has played a major, but unstated, role in establishing a new paradigm for nature conservation.

For the WWF, the NSW Auditor-General's report of August 2002 into the Department of Land and Water Conservation represented a turning point that was a stimulus for action to find a new way forward (Ray Nias, WWF, pers. comm. August 2003) (www.audit.nsw.gov.au/ perfaud-rep/ Year-2002-2003/LandClearing-Aug2002/LandClearing-Aug2002.pdf). This report identified that the *Native Vegetation Conservation Act 1997* (NVC Act) had "governed the clearing of native vegetation in NSW since 1 January 1998". The Audit's opinion was that, "Native vegetation is a complex and difficult area to regulate. There is an inherent tension between economic development and conservation. The complexity is increased by the number of government agencies and community based committees involved. Accountability for achieving the objectives of the Act has not been assigned to any one body. The NVC Act requires a native vegetation conservation strategy to be developed. Some four and a half years after the Act was introduced, the strategy has still not been announced. In our opinion, the complexities and the lack of accountability have contributed to the present position, whereby a whole-of-government approach to the protection of native vegetation in NSW has not been developed. There are currently no objectives or targets to measure progress in conserving native vegetation. Only one, of a possible twenty-two regional management plans, has been approved since the Act commenced. There is also a lack of comprehensive information about the status of, and changes to, native vegetation across rural NSW".

This concern is hinted at in the *Blueprint* but emerged pointedly in the second Wentworth report, *A new model for landscape conservation in New South Wales* (3 February 2003). In sharply critical language, this second report noted that the Native Vegetation Act was being undermined by too many exemptions and that, in the four years since the Act was introduced, approvals have been given to clear over 4000 km^2 of remnant native vegetation and there had been over 700 cases of alleged breaches of the Act. It was this second report that galvanised interest in NSW on the views of the Wentworth Group, particularly as it was released only six weeks prior to the NSW state election in March 2003 and carried, on its cover, the following quotation from NSW Premier Bob Carr (see WWF website): "The NSW Government accepts the Wentworth Group's model as the basis for its new native vegetation policy".

A primary aim of this editorial is to put together a picture of how the *Blueprint* came about, how its message struck home and what were the major elements in that message, particularly as it is already changing the face of the nature conservation debate in NSW and is set to rearrange priorities across Australia. The process of convening the Wentworth Group and assembling the report is instructive for those interested in how a group of concerned scientists produced such an effective policy document. The WWF webpage gives a pointer: "WWF Australia's Save the Bush campaign team organised a meeting of some of the best scientific minds in environmental policy in the country". This statement shows that the WWF was not just a passive publisher. It was a WWF idea in the first place. The group was convened at four days' notice, according to Hugh Possingham on "Earthbeat", 12 October 2002 (see ABC website), and they met at the Wentworth Hotel in Sydney, hence the name. Another remarkable feature of the meeting was the presence of three skilled journalists invited by the WWF to assist in the process of writing. The journalists' reports are worth examining in the light of the success of the Group's impact.

The greatest insight comes from the ABC's AM report of 11 October 2002 (http://www.abc.net.au/am/s698876.htm). "TANYA NOLAN: Horrified by the recent talk about plans to "drought-proof" the continent by turning rivers inland, a group of prominent and influential Australian scientists are today calling for sanity to prevail. Last night they gathered in Sydney, at a hurriedly-arranged crisis meeting, to develop a strategy to confront, what they see, as a serious threat to Australia's long-term sustainability. As a result, some of the nation's leading experts on the environment are to write to the Prime Minister to condemn the notion of "drought-proofing" and to call for the adoption of what they regard as less-destructive ways of dealing with prolonged dry periods. And in a move likely to stir further controversy, they've called for a review of water use rights for farmers and the re-direction of water used for irrigation, back into stressed river systems. They also want pollution charges added to food prices, to reflect the environmental cost of agricultural production. The scientists last night dubbed themselves the "Wentworth Group" in recognition of the Sydney hotel where they met. Nick Grimm filed this report. NICK GRIMM: The mood may have been convivial, but the purpose of the dinner meeting was a serious one… As their meal progressed, the scientists thrashed out ideas and strove to develop a unified strategy. Professor Mike Young, from the CSIRO, summed up their challenge. MIKE YOUNG: We have to get our ideas a lot sharper and a lot more focussed. This is the first time we've met, but there's a next step which is to produce something like a template or blueprint that takes us forward. … PETER CULLEN: We really do need to clarify the property rights of farmers for water and for others and the obligations associated with those rights. We must end broad-scale land clearing of remnant native vegetation immediately and as part of that to assist the rural communities with the adjustment that that will require. We need to change our taxation and price signals to pay for the full costs of the production of food, fibre and water, including the hidden subsidies currently borne by the environment".

In *The Australian* on 12-13 October 2003, under the headline, 'Scientists warn on drought-proofing", reporters Asa Wahlquist and Sophie Morris open with a clear statement: "Australia's drought had highlighted long-term environmental degradation that must be tackled by sweeping land and water management reforms, a group of eminent scientists said yesterday."

Reporters of the skill of Nick Grimm and Asa Wahlquist set high journalistic standards. That they were able to directly quote from the Wentworth group representatives at the time of their deliberations is good journalism. Ray Nias of WWF Australia provided another vital insight as I discussed this matter with him in his office in August 2003. He had invited three journalists, the third being rural reporter Anthony Hoy, to the WWF-convened meeting with the aim of not only reporting on what was said as the red wine flowed, but also setting the journalists the task of providing a test of relevance, a standard for positive outcomes and a criterion of newsworthiness for the Group. Nick Grimm went on to win the 2003 Australian Museum Environment Australia Peter Hunt Eureka prize for environmental journalism for his story, "The birth of the Wentworth Group". The background account of the award is on the web (at australian museum online). It gives ringing endorsement to the WWF strategy: "Circling the table, microphone in hand, ABC current affairs reporter Nick Grimm heard enough to encourage them to tell their story and speak out about their concerns". The next insight then comes from Nick Grimm himself, as quoted on the website: "Whilst all were articulate, passionate and highly motivated, they were uncertain about how to communicate to a wider audience"… "I suggested they needed a statement, one that would advance the national environment debate. After much spirited discussion between themselves, they did not disappoint". The result was the *Blueprint*. The group had thus produced a positive message and a clear solution, and used plain language that satisfied the journalists. I congratulated Ray Nias and this included his colleagues Glen Klatovsky and Peter Cosier, as well as the WWF initiative, and he agreed that he should write it up some day. I encourage him to do so. It would be a fitting response to Fleischman's (2002) observation that, "Recent exchanges between the Society for Conservation Biology and the Society for Environmental Journalists suggests that a degree of antipathy exists between scientists and the journalists". WWF's success provides a working example of Fleishman's hope that, "By uniting the forces of information and communication, we may compel decision-makers to take actions that will benefit both biodiversity and society".

A secondary aim of this editorial was to challenge aspects of the *Blueprint*. The first challenge is to its title. It is not, in my opinion, a blueprint. It is not a detailed plan, it is not a tracing that would enable one to carefully construct the final product. It is a set of guiding principles, a direction, a conceptual model. It is a pamphlet, a manifesto. Arguably, if the *Blueprint* had been a scientifically referenced document, its readability would have suffered. Vincent Serventy's (1988) book, *Saving Australia A blueprint for our survival* emphasised established themes such as regulation, planning, research and education, and also reproduced, as an appendix, the 1983 ground-breaking document *A national conservation strategy for Australia*. Neither Serventy's book nor the 1983 strategy present the economists' contribution, which is the highlight of the Wentworth Group's *Blueprint*. Essentially, the principle is that equity can be expressed in dollars. However, *The*

Ecologist's (1972) book, *A blueprint for survival*, did touch on economic instruments in the chapter "Towards the stable society: strategy for Change", under the subheading, "Conversion to an economy of stock". The view put forward is that, "One of our long-term goals, therefore, must be to unite economics and ecology. The specific measures we have proposed are, we believe, necessary steps in this direction, albeit crude ones. A raw materials tax, an amortization tax [*i.e.* one that is proportionate to the life of the product], a power tax, revised methods of calculating revealed preference [*i.e.* the values revealed to economists of the amount people are willing to pay], social time preference rate [*i.e.* an indication of society's regard for the future], and so on, with legislative provision for their enforcement, a set of air, water and land quality standards enforceable at law and linked with a grant incentive programme – these and other measures will have to be introduced at an early stage. … The key to success is likely to be careful synchronization…".

The "we' in the quote from the English journal *The Ecologist* (1972) is revealing and gives one a sense of déjà vu. The editors of *The Ecologist* prepared the blueprint and it received a ringing endorsement from a list of 34 scientific luminaries of the day, with the statement: "The undersigned, without endorsing every detail, fully support the basic principles embodied in this *Blueprint for Survival*, both in respect of the analysis of the problems we face today and in the solutions proposed". The back cover of the book picked out Sir Julian Huxley, Peter Scott, and Sir Frank Fraser-Darling as being 3 of the 34 "distinguished biologists, ecologists, doctors and economists" who supported the blueprint. The back cover offers one quote from the blueprint: "Governments are either refusing to face relevant facts, or are briefing their scientists in such a way that their seriousness is played down", and states that the blueprint, "offers radical proposals for immediate action. The storm of debate it provoked among politicians and scientists has generated constructive action and widespread concern".

Among the objectives of this editorial is to sustain the effort of seeking a blueprint for the ecological, economic and social principles for our survival. It thus maintains the momentum as it appeared in *The Ecologist*'s blueprint, then its application to Australia, such as in Serventy's blueprint. The emphasis now is on promoting more widespread debate on the Wentworth Group's *Blueprint* to ensure that it continues to generate constructive action, particularly as it is Australian in its focus and in its language.

Inherent in the Wentworth Group's *Blueprint* is a philosophy of how to view problems and solutions. It has great strengths, and it has some weaknesses, a few of which are put forward here. The primary weakness is that it does not come to grips with the population debate. Did CSIRO produce *Future Dilemmas* in vain? The *Future Dilemmas* report was not released until early November 2002, a few weeks after the meeting at the Wentworth Hotel, although the matter would have been well understood by all of the Group's members, but population was a difficult issue at the time, especially in post-Tampa Australia, with its refugee crisis. Possibly the Wentworth Group decided to focus on alternatives to "droughtproofing", rather than becoming bogged down by a debate on population. It will, however, need to be an element in any long-term model.

Another weakness that is not so apparent is the modest mention of threatened species and the lack of mention of reserves as strategies for conservation. These receive much attention in the nation's existing biodiversity strategies and state of the environment reports, as well as in the aims of many environmental NGOs. The subtext to the *Blueprint* may be that these policies and ideas have had their day as the primary focus for conservation. Threatened species may still receive attention, but they will no longer be a major determinant of landuse or land management decisions. They may become one of the units of evaluation of the success or otherwise of broader strategies. Reserves may no longer be called national parks with their traditional values of protection, and wilderness may receive even less attention. The entire landscape, divided by regions and catchments, may become the unit of management, with the emphasis on restoration. The current model of borders around remnants, even those as big as national parks, may be rejected and replaced by a network of reserves, each with targets for a percentage retention of patches of native vegetation across the landscape. This matter needs attention because there are many values in national parks that do not fit well into the economic template (Mike Young's alternative word for "blueprint") for environmental decision-making.

The Wentworth Group enjoys a freedom not given to public servants to participate in public debate when government policy is under scrutiny. There are many public service scientists researching socially relevant environmental issues from climate change in north Queensland to fox control in Tasmania, and there is an informed public keen to hear the results of their work as it emerges. A strong argument exists for their voice to be heard as part of the public debate. Public service scientists are concerned scientists too, not necessarily as well-known as those in the Wentworth Group, but they will be an essential part of any reform and restoration strategy. The public servants in the Wentworth Group are first-rate scientists, great communicators and a model for other public servant scientists.

Now, consider for a moment the impact on your own research if it does not fall within the scope of the *Blueprint*. Will your work as a scientist be funded under the *Blueprint*? The Wentworth emphasis to date has been on vegetation clearing and water reform. Let us suppose that your specialty is marine invertebrates, or that you are a taxonomist in a museum, and your species and their habitats are out of sight. Will you flourish in the new model set out in the *Blueprint*? If the *Blueprint* does not, in a subsequent volume, offer some recognition of these vital support services then these specialties will wither in the fiercely competitive climate for the conservation dollar.

The conclusion one can draw is that the *Blueprint* is a way forward. It is a breakthrough for biodiversity conservation and for restoring vast tracts of Australia – but it is not what it claims to be, it is not a blueprint. It deserves to be widely read, taken up and implemented, but not uncritically. Its limits may ultimately be found in what are also its strengths, the application of a new economic paradigm that has ecology in its title but has yet to be fully tested as the overarching model for change to conserve biodiversity. The approach has yet to penetrate mainstream conservation biology in Australia, although thoughtful attempts at bridges are already appearing and possible limitations in this mode of thinking are being identified (Gibbons *et al.* 2002). Various workers are arriving at the same general conclusion as the *Blueprint* although from different starting points, and their views too are shaking the foundations (e.g. Archer 2002, Grigg 2002, Possingham 2001, Recher 2002). This new transdisciplinary arena of ecological economics is still gathering strength, the journal *Ecological Economics* is still largely oriented towards academic economists, and the discipline has yet to find conservation biologists routinely employing its terms, if not its ideas. Nevertheless, the eulogies to Donella Meadows (of *Limits to Growth* fame) in the August 2001 edition of the journal (e.g. Costanza 2001) bears witness to the convergence of interests. Indeed, it is no surprise to note that Mike Young is an associate editor of the journal. The *Blueprint* is in that vein. Thus a major breakthrough of the *Blueprint* is its successful application of ecological economics to two of the most pressing issues in Australia's *State of the Environment* reports. The SoE reports are, as has been stated before in these editorials, one of the great innovations of the 1990s. They make a major contribution to society and need to continue to be supported by governments at all levels from the Commonwealth to local shires.

If you take umbrage at what I have said, does this mean that you find no fault, no shortfall, no limitations in the *Blueprint*? If you think that this editorial has missed the point, failed in some way or, conversely, deserves support, or if you see other dimensions to the issue, you are invited to send a letter to the editors. In producing a critical set of comments on the *Blueprint*, my aim was to ensure that a vital document receives the coverage it deserves and to present its limitations. The iterative process of putting forward ideas, listening to criticism and then producing a new generation of ideas has been a winning formula for progress in scientific thinking. This editorial was written in that spirit of constructive criticism.

Daniel Lunney
Editor

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